

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF TEXAS
SAN ANTONIO DIVISION

M-I LLC,	§	No. SA:15–CV–406–DAE
	§	
Plaintiff,	§	
	§	
vs.	§	
	§	
FPUSA, LLC,	§	
	§	
Defendant.	§	

AMENDED ORDER GRANTING PLAINTIFF’S MOTION FOR
PRELIMINARY INJUNCTION ON REMAND FROM THE UNITED STATES
COURT OF APPEALS FOR THE FEDERAL CIRCUIT

On September 24, 2015, the Federal Circuit Court of Appeals affirmed this Court’s holdings that Claim 16 of U.S. Patent No. 9,004,288 (the “’288 Patent”) is likely infringed and that Defendant FPUSA, LLC (“Defendant”) had not raised a substantial question of invalidity based on this Court’s finding that the claims of the ’288 Patent were supported by the written description in the parent application filed in 2006. The Federal Circuit further found that this Court did not abuse its discretion in determining that Plaintiff M-I LLC (“Plaintiff”) would be irreparably harmed absent a preliminary injunction, that the balance of equities is neutral, and that the public interest favored an injunction. M-I LLC v. FPUSA, LLC, No. 2015-1870, 2015 WL 5603901 (Fed. Cir. Sept. 24, 2015) (“Fed. Cir. Op.”). The Federal Circuit remanded with direction for this Court to reform

the injunction consistent with the discussion and precedent cited in the Federal Circuit's opinion and Rule 65(d) of the Federal Rules of Civil Procedure. Fed. Cir. Op. at 6–7.

The Federal Circuit has now issued the mandate, which was received and docketed by the Clerk of this Court on November 2, 2015. (Dkt. # 88.) This Court now has jurisdiction over the matter. Accordingly, having received and considered the input from the parties (Dkts. ## 82, 83), the Court reforms its prior preliminary injunction as follows.¹

BACKGROUND

Plaintiff is a limited liability company engaged in the business of supplying oil drilling fluid and related equipment and services. (Dkt. # 1 ¶ 1; Dkt. # 8 at 1.) Drilling fluid serves to lubricate and cool drill bits during the drilling process, and also serves to convey drill cuttings away from the bore hole. (Dkt. # 8 at 2.) Drilling fluids are typically very expensive; thus, to reduce the cost of drilling operations, operators seek to recover and reuse as much drilling fluid as possible. (*Id.* at 2–3.) A “shale shaker,” which is used to remove large solids from the drilling fluid, is one piece of equipment used in the recovery process. (*Id.* at 3.)

¹ The Court emphasizes that the following factual findings and legal analysis have been taken substantially verbatim from this Court's Orders Granting Plaintiff's Motion for Preliminary Injunction (Dkt. # 31) and Denying Defendant's Motion for Reconsideration (Dkt. # 47). The conclusions herein were affirmed by the Federal Circuit Court of Appeals. (Dkt. # 77.)

Operators feed “slurry” (a mixture of drilling fluid and drill cuttings) onto the shaker bed, where a vibrating screen separates the drilling fluid from drill cuttings and other solids. (Id.) The drilling fluid then falls through the screen into a receptacle below. (Id.)

Plaintiff states that in 2006, its inventor, Brian Carr (“Carr”), filed several patent applications with the United States Patent and Trademark Office (“USPTO”) regarding improvements to shakers and the drilling fluid recovery process. (Id. at 3.) On April 14, 2015, one of those applications issued as U.S. Patent No. 9,004,288 (the “’288 Patent”). (Id.; Dkt. # 8, Ex. A.) The abstract of the ’288 Patent describes Carr’s invention as follows:

A system for separating components from a slurry of drilling fluid and drill cuttings on a shaker screen having an upper side and a lower side within a shaker. The system also has a pressure differential generator to pull an effective volume of air through a section of the shaker screen to enhance the flow of drilling fluid through the section of the shaker screen and the separation of drilling fluid from drill cuttings and further maintain an effective flow of drill cuttings off the shaker. A method of separating components of a slurry of drilling fluids and solids has the steps of delivering the slurry to a shaker, flowing the slurry over a first screen and applying an effective amount of vacuum to a first portion of the first screen to remove the drilling fluids from the slurry without stalling the solids on the first screen.

(Dkt. # 8, Ex. A at 1.)

Figure 4 of the ’288 Patent illustrates some of the features of Carr’s invention. It shows a shaker with multiple screens, and a “sump” (reservoir) under the screens. An outlet on the shaker connects to a pressure differential device,

which creates pressure differential across the screens. The pressure differential pulls air through the screen, improving drilling fluid recovery as well as the flow of drill cuttings off the shaker. (Id. at 4.) In different iterations of the device, one or more sumps may be located under the screens such that a pressure differential may be provided across fewer than all of the shaker screens. (Id., Ex. A, 7:8–14.) Adjusting the volume of air pulled through the screens prevents drill cuttings from stalling as the slurry passes across the screen. (Id. at 4:49–51.) Figure 6 of the ’288 Patent illustrates other aspects of Carr’s invention. It shows a screen installed on top of a sump, which is fluidly connected via flow line to a degassing chamber and a pressure differential device in order to generate the desired pressure differential across the screen. (Dkt. # 8 at 4; id., Ex. A.)

Plaintiff further states that in 2010, FP Marangoni, Inc. (“FPM”), Defendant’s Canadian parent company, approached Plaintiff with a “Vac-Screen system.” (Dkt. # 8-21 (“Daboin Decl.”) ¶ 4.) Like Carr’s invention, the Vac-Screen system generates a pressure differential across shaker screens. (Dkt. # 8 at 2.) Because Plaintiff had not yet developed its own product embodying the ’288 Patent, Plaintiff rented the drop-in trays of the Vac-Screen system from FPM. (Daboin Decl. ¶ 4.) Plaintiff began offering those drop-in trays with its own pressure differential technology in the United States market, and branded the product as Plaintiff’s “MAXIMIZER.” (Id. ¶ 5.)

Eventually, Plaintiff states that it became clear that Defendant, which is an American subsidiary of FPM, intended to market its Vac-Screen system in the United States in direct competition with Plaintiff's MAXIMIZER. (Id. ¶ 7; Dkt. # 8-20 ("Carter Decl.") ¶ 6.) Plaintiff consequently focused on completing the commercialization of the '288 Patent technology, called the "Screen Pulse system." (Daboin Decl. ¶ 8.) Screen Pulse is a "simple retrofit installation" for Plaintiff's existing Meerkat and Mongoose series shakers. (Dkt. # 8 at 5; id., Ex. C.) An outlet connected to the sump, installed below the last shaker screen, is fluidly connected to a pressure differential device. The Screen Pulse creates suction, which pulls residual drilling fluid from the cuttings as the shaker processes the slurry. (Dkt. # 8 at 6; id., Ex. C.)

Defendant presents the Court with additional factual background information. Defendant states that FPM first installed its Vac-Screen system in 2010, and that the system was commercially successful. (Dkt. # 22, Ex. 2 ("Bruce Decl.") ¶ 4.) In the same year, it filed a patent application on the Vac-Screen technology, and on April 28, 2015, the United States Patent Office issued U.S. Patent No. 9,015,959 (the "'959 Patent") to FPM as assignee. (Bruce Decl. ¶ 4; Dkt. # 22, Ex. 10.) The Vac-Screen system consists of a tray attached either to the end of a shaker or under the last screen. (Dkt. # 22, Ex. 1 ("Matthews Decl.") ¶¶ 52–54; Bruce Decl. ¶ 3.) It applies a vacuum to improve recovery of the

remaining slurry. (Matthews Decl. ¶ 52–54; Bruce Decl. ¶ 3.) Importantly, the Vac-Screen system only applies vacuum pressure to the last screen. (Matthews Decl. ¶ 54; Bruce Decl. ¶ 3.)

Defendant further states that on October 9, 2010, Plaintiff and FPM entered into a non-disclosure agreement for the purpose of allowing Plaintiff to evaluate the Vac-Screen technology. (Dkt. # 22, Ex. 5.) Although Plaintiff tested the product, it did not license or otherwise market it at that time. (Bruce Decl. ¶ 6.) Defendant continued to commercialize the system, and in July 2012, Plaintiff and FPM entered into a second non-disclosure agreement “to discuss a potential business relationship . . . for possible future rentals.” (Dkt. # 22, Ex. 6.) Plaintiff agreed to provide FPM with access to its customer base, and FPM agreed to provide Plaintiff with the Vac-Screen technology. (Bruce Decl. ¶¶ 7–10.)

Later that same year, Plaintiff and FPM entered into another agreement to facilitate Plaintiff’s deployment of the Vac-Screen system to its customers and to share revenues generated from system rentals.² (Id. ¶ 8; Dkt. # 22, Ex. 3 (“Jackson Decl.”) ¶ 5.) Defendant states that the relationship was a success, and on August 1, 2013, Plaintiff and FPM entered into a confidentiality agreement “in connection with . . . a possible acquisition of [FPM] by [Plaintiff].”

² Plaintiff and FPM agreed to split revenue on a 60/40 basis. If Plaintiff provided the vacuum, Plaintiff paid FPM 40% of the revenue generated. If FPM provided the vacuum, Plaintiff paid FPM 60% of the revenue. (Bruce Decl. ¶ 8.)

(Dkt. # 22, Ex. 7.) Plaintiff offered to buy FPM, but in November 2013, FPM rejected Plaintiff's offer. (Id., Ex. 4 ("Russell Decl.") ¶ 6.) Defendant claims that while the parties negotiated the potential purchase, Plaintiff developed a back-up plan "to force [Defendant] out of the market," (Dkt. # 22 at 4), and on April 16, 2015, two days after the '288 Patent issued, Plaintiff terminated its agreement with FPM. (Russell Decl. ¶ 6.)

On May 15, 2015, Plaintiff filed the above-captioned lawsuit alleging that Defendant infringes the '288 Patent. (Dkt. # 1.) On May 21, 2015, Plaintiff filed a Motion for Preliminary Injunction seeking to prevent Defendant from infringing Claims 1 and 16 of the '288 Patent. (Dkt. # 8.) After full briefing, the Court held a hearing on the matter on June 15, 2015, and on June 24, 2015, issued an Order Granting Plaintiff's Motion for Preliminary Injunction (Dkt. # 31). On July 21, 2015, the Court denied Defendant's Motion for Reconsideration. (Dkt. # 47.) On the same day, the Court issued an "Order on Bond Amount and Activities Enjoined." (Dkt. # 48.)

Defendant appealed all three Orders to the United States Court of Appeals for the Federal Circuit on July 22, 2015. (Dkt. # 49.) After the Federal Circuit ordered semi-expedited briefing by the parties on appeal, this Court temporarily stayed the injunction pending the outcome of that appeal. (Dkt. # 62.) On September 24, 2015, the Federal Circuit affirmed this Court's injunction with

respect to Claim 16, vacated the Court's injunction as to Claim 1, and remanded for this Court to reform its injunction consistent with the Federal Circuit's opinion and Rule 65(d) of the Federal Rules of Civil Procedure. Fed. Cir. Op. at 7.

LEGAL STANDARD

A patentee suing an alleged infringer for patent infringement may, for the purpose of immediately preventing further alleged infringement, move for the "extraordinary relief" of a preliminary injunction. 35 U.S.C. § 283; Titan Tire Corp. v. Case New Holland, Inc., 566 F.3d 1372, 1375 (Fed. Cir. 2009). The purpose of a preliminary injunction is "to preserve the status quo pending a determination of the action on the merits." Litton Sys., Inc. v. Sundstrand Corp., 750 F.2d 952, 961 (Fed. Cir. 1984). A party seeking a preliminary injunction must establish (1) that it is likely to succeed on the merits, (2) that it is likely to suffer irreparable harm in the absence of relief, (3) that the balance of equities is in its favor, and (4) that an injunction is in the public interest. Winter v. Nat. Res. Def. Council, Inc., 555 U.S. 7, 20 (2008).

Because the grant of a preliminary injunction is not unique to patent law, the Federal Circuit applies the law of the regional circuit when reviewing and interpreting such decisions. Aeovoe Corp. v. AE Tech. Co., 727 F.3d 1375, 1381 (Fed. Cir. 2013). However, "[s]ubstantive matters of patent infringement are unique to patent law, and thus the estimated likelihood of success in establishing

infringement is governed by Federal Circuit law.” Revision Military, Inc. v. Balboa Mfg. Co., 700 F.3d 524, 526 (Fed. Cir. 2012).

DISCUSSION

I. Likelihood of Success on the Merits

A party seeking a preliminary injunction must first show a likelihood of success on the merits. Winter, 555 U.S. at 20. For a patentee-plaintiff to establish that it is likely to succeed on the merits of a patent infringement claim, it must show (1) that it is likely to prove infringement of the patent claim, and (2) that the infringed-upon claim is valid. AstraZeneca LP v. Apotex, Inc., 633 F.3d 1042, 1050 (Fed. Cir. 2010). To meet its burden under this prong, a patentee must prove that “success in establishing infringement is more likely than not.” Trebro Mfg., Inc. v. Firefly Equip., LLC, 748 F.3d 1159, 1166 (Fed. Cir. 2014) (internal quotation marks omitted). “A preliminary injunction should not issue if an alleged infringer raises a substantial question regarding either infringement or validity.” AstraZeneca, 633 F.3d at 1050. The Court addresses the infringement and validity elements in turn below.

A. Infringement

To establish infringement, Plaintiff must show that the allegedly infringing product or method meets each limitation of the ’288 Patent claims,

either literally or under the doctrine of equivalents. Dynacore Holdings Corp. v. U.S. Philips Corp., 363 F.3d 1263, 1272 (Fed. Cir. 2004). Courts engage in a two-step analysis in determining whether a claim has been infringed: “First, the claim must be properly construed to determine its scope and meaning. Second, the claim as properly construed must be compared to the accused device or process.” Carroll Touch, Inc. v. Electro Mech. Sys., Inc., 15 F.3d 1573, 1576 (Fed. Cir. 1993).

Plaintiff claims that Defendant directly and indirectly infringes Claim 16 of the '288 Patent. (Dkt. # 8 at 10.) To establish direct infringement, Plaintiff must show that Defendant performed or used each and every element of the claimed method. Aristocrat Techs. Austl. Pty Ltd. v. Int'l Game Tech., 709 F.3d 1348, 1362 (Fed. Cir. 2013). Claim 16 reads as follows:

16. A system comprising:
 a first screen having an upper side and a lower side for separating drill cuttings and drilling fluid within a shaker;
 a pressure differential generator configured to pull air or vapor through the first screen to enhance the flow of drilling fluid through the first screen with respect to a second screen within the shaker in which the pressure differential generator does not create a pressure differential between an area above and an area below the second screen; and
 a sump located below the first screen and configured to collect the air or vapor and the drilling fluid that passes through the first screen; and
 a degassing chamber in fluid communication with the pressure differential generator and the swap³ [sic] and located external to the shaker for collecting all of the air or vapor and the drilling fluid in the sump and removing air or vapor from the drilling fluid.

³ “Swap” should read “sump.” (Dkt. # 8 at 9 n.4; id., Ex. A-1.)

(Dkt. # 8, Ex. A, 12:47–65.)

Defendant argues that the Vac-Screen system cannot infringe Claim 16 of the '288 Patent for two reasons. First, Plaintiff's technology involves applying a pressure differential to the first screen, whereas Defendant's system applies a vacuum to the last screen in a shaker. (Dkt. # 22 at 7.) Second, the Vac-Screen system does not contain a "degasser" as required by Claim 16. (Id. at 12.)

1. "First" Screen Limitation

Defendant first argues that the Vac-Screen system cannot infringe Claim 16 of the '288 Patent because Plaintiff's technology involves applying a pressure differential to the first screen nearest a shaker's inlet, whereas Defendant's system applies a vacuum to the last screen nearest the outlet. (Dkt. # 22 at 7.) The first step in the Court's infringement analysis is to properly construe the claim to determine its scope and meaning. Carroll Touch, Inc., 15 F.3d at 1576. Defendant argues that Plaintiff asks the Court to construe the word "first" to mean "last" when comparing the shaker screens of the Screen Pulse and Vac-Screen systems. (Dkt # 22 at 6.) As seen above, Claim 16 of the '288 Patent makes repeated reference to a pressure differential applied to a "first screen." (See Dkt. # 8, Ex. A) (emphasis added). In contrast, Defendant states that the Vac-Screen system applies a vacuum only to the last screen. (Dkt. # 22 at 8; Matthews Decl. ¶ 54; Bruce Decl. ¶ 3.)

Federal Circuit law holds that claim terms are generally given their ordinary meaning. In re Papist Licensing Digital Camera Patent Litig., 778 F.3d 1255, 1261 (Fed. Cir. 2015). In determining a term’s “ordinary meaning,” courts look to the context of the claim and the whole patent document. Id. Even if a term’s meaning is “plain on the face of the claim language, the patentee can, by acting with sufficient clarity, disclaim such a plain meaning or prescribe a special definition.” Id. (quoting World Class Tech Corp. v. Ormco Corp., 769 F.3d 1120, 1123 (Fed. Cir. 2014)). Ultimately, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” Id. (quoting Reinshaw PLC v. Marposs Societa’ per Azioni, 158 F.3d 1243, 1250 (Fed. Cir. 1998)) (alteration in the original). When construing a claim, courts look to the patent specification as the “primary basis” for the analysis. Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc).

Contrary to Defendant’s assertions, the ’288 Patent does not indicate that it covers only configurations in which the pressure differential is applied to the screen closest to the shaker’s inlet. The specification states:

For example, where separator **60** has four screens in series, sump **50A** may be located proximate inlet **52** under the first two screens. Sump **50B** may be located proximate outlet **54B**, under the last two screens (where first and last corresponds to the direction of flow from inlet **52** to outlet **54B**). Sump **50A** may thus create an independent zone from sump **50B**, allowing for operations of the two zones at the same or

different pressure differentials. One or more devices may be provided to create a pressure differential across either or both sets of screens. The pressure differential across the screens in either zone may be manipulated

(Dkt. # 8, Ex. A, 7:21–31) (emphasis added). While Defendant points to the language in parentheses, indicating that “first” and “last” correspond to the direction of flow from inlet to outlet, the underlined language alone makes clear that the pressure differential may be applied to any screen. In another instance, the specification states that, “[o]ne or more sumps may be located under the screens such that a pressure differential may be provided across less than all of the two or more screens.” (*Id.* at 7:10–13.) Again, this language indicates that the pressure differential may be applied to any screen—not just the screen closest to the inlet.

Additionally, the Federal Circuit has noted that “[t]he use of the terms ‘first’ and ‘second’ is a common patent-law convention to distinguish between repeated instances of an element or limitation.” 3M Innovating Props. Co. v. Avery Dennison Corp., 350 F.3d 1365, 1371 (Fed. Cir. 2003). As such, the terms do not denote spatial location. Free Motion Fitness, Inc. v. Cybex Intern., Inc., 423 F.3d 1343, 1348 (Fed. Cir. 2005). The Court thus construes the terms “first” and “second” to distinguish between repeated instances of an element or limitation, and does not construe them to denote spatial location relative to the shaker’s inlet.

The second step in the Court’s analysis is to compare the claim as properly construed to the accused device or process. Carroll Touch, Inc., 15 F.3d

at 1576. Again, Claim 16 of the '288 Patent makes repeated reference to a “first screen” to which a pressure differential is applied. (Dkt. # 8, Ex. A, 11:43–51; 12:47–65). Plaintiff argues that the Vac-Screen system also performs this step, and points to Defendant’s own website and promotional video as evidence. (Dkt. # 8, Ex. K.) Defendant counters that the Vac-Screen system applies a vacuum to the last screen on the shaker, rather than the first. (Dkt. # 22 at 4; Matthews Decl. ¶¶ 54, 58; Bruce Decl. ¶ 3.)

However, Defendant’s argument is premised on an incorrect construction of the claim terms—as explained above, “first” and “second” do not reference the sequential order of the screens. Applying the Court’s construction of the term “first” to Claim 16, the Vac-Screen system infringes these claims if it applies a pressure differential to one of multiple screens in a shaker. Defendant affirmatively states that the Vac-Screen system contains a tray and vacuum below the last screen in a shaker, (Dkt. # 22 at 4; Matthews Decl. ¶¶ 54, 58; Bruce Decl. ¶ 3), and Plaintiff’s evidence corroborates this statement (Dkt. # 8, Ex. E).

Because the Vac-Screen system creates a pressure differential across one of multiple screens in a shaker, the Court finds that the Vac-Screen system satisfies the “first screen” limitation of Claim 16.

On July 21, 2015, Defendant moved for reconsideration and raised several arguments regarding the Court’s construction of the “first screen”

limitation, all of which were either raised before the Court issued the injunction or could have been raised prior to the Court's Order. Such arguments are inappropriate on a Rule 59(e) motion for reconsideration. Templet v. HydroChem Inc., 367 F.3d 476, 479 (5th Cir. 2004). Nevertheless, the Court addresses Defendant's arguments briefly. First, Defendant pointed to the same language in the '288 Patent that it repeatedly referenced in its Response to Plaintiff's Motion for Preliminary Injunction, and again insists that the terms "first screen" and "second screen" as used in the specification always denote spatial order. (Dkt. # 35 at 5–6, citing Dkt. # 22, Ex. 8 at 7:21–26, 8:24–29.) Plaintiff argued that both of these excerpts describe specific embodiments of the patent, and cannot be read as providing mandatory definitions applying to every embodiment covered by the patent. (Dkt. # 41 at 6.)

Defendant responded that "[w]hether a definition is provided 'in connection with the description of a preferred embodiment' is irrelevant—the definition governs." (Dkt. # 35 at 8, quoting Edwards Lifesciences LLC v. Cook Inc., 582 F.3d 1322, 1334 (Fed. Cir. 2009)). In Edwards Lifesciences, the Federal Circuit considered the definition of the word "malleable" within a patent specification. 582 F.3d at 1334. The court noted that "the location within the specification in which the definition appears is irrelevant." Id. The court further stated that "the specification's use of 'i.e.' signals an intent to define the word to

which is refers, ‘malleable,’ and that definition was not limited to the embodiment being discussed.” Id. Here, the language cited by Defendants does not indicate an intent to define the word “first” in such a way that it is not limited to the embodiment being discussed. On the contrary, the language indicates that the definitions of the terms “first” and “second” are limited to a particular specification. The relevant section of the specification states:

For example, where separator **60** has four screens in series, sump **50A** may be located proximate inlet **52** under the first two screens. Sump **50B** may be located proximate outlet **54B**, under the last two screens (where first and last corresponds to the direction of flow from inlet **52** to outlet **54B**).

(Dkt. # 22, Ex. 8 at 7:21–26.) The Court reads the word “where” to indicate that “first” and “last” correspond to the direction of flow in this particular instance, but that it need not always do so, distinguishing this case from Edwards Lifesciences.

Next, Defendant argued that the word “first” should be given a specific meaning in this context because “sequence matters and the specification so requires.” (Dkt. # 35 at 6.) As the Court noted in its previous Order (Dkt. # 31), the Federal Circuit has held that “[t]he use of the terms ‘first’ and ‘second’ is a common patent-law convention to distinguish between repeated instances of an element or limitation.” 3M Innovating Props. Co., 350 F.3d at 1371. As such, the terms do not denote spatial location. Free Motion Fitness, 423 F.3d at 1348.

While acknowledging this precedent, Defendant contended that in this instance, the

word “first” carries a specific meaning in the specification—namely, that it describes the screen closest to a shaker’s inlet—and that consequently it should not be given a “generic” meaning. (Dkt. # 35 at 6.) In support of this argument, Defendant cited several district court opinions. The Court again notes that these opinions do not constitute binding precedent, but nevertheless finds that they are distinguishable because in each case, the district court construed the terms in light of the particular patent specification before it.⁴

Defendant also argued that the Court’s construction is erroneous

⁴ First, in Leighton Technologies LLC v. Oberthur Card Systems, S.A., the district court held that in the context of the patent before it, it was “abundantly clear” that the terms “first,” “second,” and “third” denoted the relative order of steps, and noted that plaintiff’s counsel admitted as much at the Markman hearing. 385 F. Supp. 2d 361, 382 (S.D.N.Y. 2005). However, the court also noted that as a general matter, those terms “are commonly used to identify separate claim elements,” *id.*, and in this case, for the reasons stated above, the specification does not make “abundantly clear” that the terms “first screen” and “second screen” always denote relative spatial order.

Next, in Applera Corp. v. Micromass UK Ltd., the plaintiff disclaimed its construction of the terms “first” and “second” as identifiers of separate elements in the course of patent prosecution. 186 F. Supp. 2d 487, 507 (D. Del. 2002). Despite this disclaimer, the court looked to the patent specification to conclude that in the context of that particular specification, “first” and “second” denoted relative, rather than absolute, order. *Id.* at 507–08.

Third, in Keurig, Inc. v. Kraft Foods Global, Inc., the district court construed the terms “first and second chambers” to denote sequential order. No. 07-017(GMS), 2008 WL 5727542, at *1 (D. Del. Jan. 23, 2008). However, as Plaintiff points out, this case is distinguishable on the grounds that the device in question only contained two chambers. *Id.* at *1 n.1.

Finally, in Exmark Manufacturing Co. Inc. v. Briggs & Stratton Power Products Group, LLC, the parties agreed to the construction of the term “first flow control baffle” prior to the Markman hearing. No. 8:10CV187, 2011 WL 5976264, at *4 (D. Neb. Nov. 29, 2011).

because it is inconsistent with Claim 16, the prior art Hensley device described in the '288 Patent, and the fact that the Patent Office issued Defendant's parent company's patent (the '959 Patent) over the disclosure in the '288 Patent. (Dkt. # 35 at 5–6.) Because Defendant did not raise these arguments in its Response in Opposition to Plaintiff's Motion for Preliminary Injunction, although it could have, the arguments are inappropriately raised on a motion for reconsideration. Without stating an opinion as to the merits of Defendant's new arguments, the Court does not address them here.

2. "Degassing Chamber"

Second, Defendant argues that Plaintiff cannot demonstrate a likelihood of success on the merits with respect to Claim 16 because the Vac-Screen system does not include a "degassing chamber" as required by Claim 16. (Dkt. # 22 at 12.) According to Defendant, a "degassing chamber is specialized equipment with known function and meaning within the field of drilling recovery fluid." (Matthews Decl. ¶ 20.) The '288 Patent states that drilling fluid is "degass[ed] to remove remaining entrained gases. Degassing the drilling fluid may be performed by any method known in the art." (Dkt. # 22, Ex. 8, 11:7–9.) In other words, according to Plaintiff, a degassing chamber is a tank that separates drilling fluid from gases entrained in the fluid. (Dkt. # 24 at 6–7.)

Plaintiff points out that the '959 Patent describes two “accumulator tanks” providing “fluid/gas separation.” (Dkt. # 22, Ex. 10, 8:61–64.)

Furthermore, Defendant’s own Technology Evaluation Report of the Vac-Screen system stated that “[a]ttached to the manifold is a vacuum line with a fluid or air separator.” (Dkt. # 24, Ex. S at 6.) The Court therefore finds the Vac-Screen system includes a system by which the drilling fluid is separated from residual air or gas, as stated in Claim 16. For the foregoing reasons, the Court finds that Plaintiff has met its burden of showing a likelihood of the success of the merits on its direct infringement claim with respect to Claim 16.

Defendant further moved for reconsideration on the Court’s finding that the Vac-Screen system utilizes a “degassing chamber.” (Dkt. # 35 at 7.) Defendant maintained that (1) the limitation in the '288 Patent requires collecting all of the air or vapor from the drilling fluid, and simply removing “residual” air or gas is insufficient; (2) there is no evidence that Defendant is actually practicing the degassing disclosure in the '959 Patent; and (3) the Court erroneously relied on language referring to a vacuum line fluid or air separator. (Dkt. # 35 at 7–8.)

Again, the “degassing chamber” limitation of Claim 16 provides for a “degassing chamber in fluid connection with the pressure differential generator and the [sump] and located external to the shaker for collecting all of the air or vapor and the drilling fluid in the sump and removing air or vapor from the drilling

fluid.” (Dkt. # 22, Ex. 8 at 12:59–65). The degassing chamber thus collects all of the air or vapor along with the drilling fluid, and removes the air or vapor from the drilling fluid. The Court is unpersuaded by Defendant’s first argument—the word “residual” in the Court’s first Order (Dkt. # 31) was not intended to denote any particular amount of air or vapor that must be removed in the degassing process.

In holding that the Vac-Screen system contains a degassing chamber, the Court relied in part on the ’959 Patent, which describes two “accumulator tanks” providing “fluid/gas separation.” (Dkt. # 22, Ex. 10, 8:61–64.) On reconsideration, Defendant argued that there is no evidence that it actually performs this disclosure. (Dkt. # 35 at 7.) However, Defendant submitted a declaration stating that the ’959 Patent covers the Vac-Screen system, (“Bruce Decl.,” Dkt. # 22, Ex. 2 at ¶ 4), and that four of the claims in the ’959 Patent require a fluid/gas separation system (Dkt. # 43 at 13 n.7). Furthermore, as the Court stated in its first Order (Dkt. # 31), Defendant’s Technology Evaluation Report of the Vac-Screen system stated that “[a]ttached to the manifold is a vacuum line with a fluid or air separator.” (Dkt. # 24, Ex. S at 6.) Defendant argued that this vacuum line cannot be a degassing “chamber.” (Dkt. # 43 at 13–14.)

Defendant pointed out that the Technology Evaluation Report describes a “vacuum line with a fluid or air separator, which is connected to the

vacuum collection tank.” (Dkt. # 24, Ex. S at 6.) Defendant contended that this language shows that the vacuum line which performs the fluid or air separation is separate from the “vacuum collection tank.” Plaintiff contends that this entire system performs a degassing function and constitutes a “degassing chamber.”

(Dkt. # 41 at 10.) The Court finds that the “degassing chamber in fluid connection with the pressure differential generator and the [sump] . . . for collecting all of the air or vapor and the drilling fluid . . . and removing air or vapor from the drilling fluid” described in the ’288 Patent performs the same function as the “vacuum line with a fluid or air separator, which is connected to the vacuum collection tank” in the Vac-Screen system. For the foregoing reasons, the Court finds that Plaintiff has met its burden of showing a likelihood of the success on the merits of its direct infringement claim with respect to Claim 16 of the ’288 Patent.

B. Validity

“Even if a patentee shows it will likely prove infringement, the accused infringer can defeat the likelihood of success on the merits by raising a substantial question as to the validity of the patent in suit.” Wavetronix LLC v. Iteris, Inc., No. A-14-CA-970-SS, 2015 WL 300726, at *6 (W.D. Tex. Jan. 22, 2014) (citing Trebro, 748 F.3d at 1169). At the preliminary injunction stage, the burden of raising a substantial question of validity rests with the party attacking validity, while the party seeking the injunction bears the burden of showing “a

reasonable likelihood that the attack on its patent’s validity would fail.” Oakley, Inc. v. Sunglass Hut Intern., 316 F.3d 1331, 1339–40 (Fed. Cir. 2003) (internal quotation marks omitted).

There is a statutory presumption that issued patents are valid. 35 U.S.C. § 282. However, Defendant argues that there is a substantial question as to the validity of the ’288 Patent because it was anticipated by prior art. (Dkt. # 22 at 15.) Specifically, Defendant raises an on sale bar defense pursuant to 35 U.S.C. § 102(b), which provides that a claim is invalid if “the invention . . . was on sale in this country more than a year prior to the date of application for patent in the United States.” Defendant contends that because its Vac-Screen system has been on sale in the United States since 2010, Plaintiff’s patent, which Defendant states has an application date of 2013, is invalid. (Id.) The on-sale bar invalidates a patent when “there was a definite sale or offer for sale of the claimed invention prior to the critical date, defined as one year prior to the U.S. filing date to which the application was entitled.” Linear Tech. Corp. v. Micrel, Inc., 275 F.3d 1040, 1047 (Fed. Cir. 2001) (quoting Mas–Hamilton Grp., Inc. v. LaGard, Inc., 156 F.3d 1206, 1216 (Fed. Cir. 1998)) (internal quotation marks omitted).

The critical issue in this case is the application date to which the ’288 Patent is entitled (the “priority date”). The ’288 Patent issued from an application filed on March 18, 2013. (Dkt. # 8, Ex. A.) However, Plaintiff argues that the

'288 Patent is entitled to an earlier priority date because it is a continuation of another patent (the "'360 Patent") which issued from an application filed on September 29, 2006. (Dkt. # 24 at 12.) Defendant disagrees, and contends that the '288 Patent is not a continuation of the earlier patent. (Dkt. # 22 at 15.) "To obtain the benefit of the filing date of a parent application, the claims of the later-filed application must be supported by the written description in the parent 'in sufficient detail that one skilled in the art can clearly conclude that the inventor invented the claimed invention as of the filing date sought.'" Anascape, Ltd. v. Nintendo of Am. Inc., 601 F.3d 1333, 1335 (Fed. Cir. 2010) (quoting Lockwood v. Am. Airlines, Inc., 107 F.3d 1565, 1572 (Fed. Cir. 1997)).

Defendant argues that the '288 Patent is not entitled to the earlier priority date because the '288 Patent contains seven additional paragraphs of text not included in the specification of the '360 Patent. (Dkt. # 22 at 16.) According to Defendant, this newly added material is necessary to support the new claims in the '288 Patent. (Id.) Defendant points out that Claim 16 requires "a first screen having an upper side and a lower side for separating drill cuttings and drilling fluid within a shaker," and argues that the only written description of this element is in the new text of the '288 Patent. (Dkt. # 22 at 16.) Plaintiff again argues that the 2006 application supports this limitation. (Dkt. # 24 at 14.) Paragraphs 22 and 24 of the 2006 application state:

[E]mbodiments disclosed herein relate to a method for separating components of a slurry A slurry may be separated using a screen separator having a pressure differential across the screen A sump 50 is located below the screen mounting to receive material passed through the screen 42 Material not passing through screen 42 is discharged off the end of the screen 42 and suitably collected.

(Dkt. # 24, Ex. W ¶¶ 22, 24.) The Court finds that this language anticipates slurry being deposited on the upper side of a screen, drilling fluid passing through the screen, and drilled cuttings remaining on the upper side of the screen for collection.

Where a party challenging an injunction raises a question as to the validity of a patent, the party seeking an injunction need only show “a reasonable likelihood that the attack on its patent’s validity would fail.” Oakley, Inc., 316 F.3d at 1339–40. The Court finds that Plaintiff has met its burden of showing a reasonable likelihood that the 2006 application supports Claim 16 of the ’288 Patent, and that the ’288 Patent is entitled to a priority date of September 29, 2006. Because the Vac-Screen system was not on sale prior to that date, Defendant has failed to raise a substantial question as to the validity of the ’288 Patent.

On reconsideration, Defendant presented two arguments regarding invalidity. First, Defendant argued that the Court erroneously disregarded the significance of a more narrowly-defined “first screen” in Claim 16. Claim 16 describes a first screen which has “an upper side and a lower side for separating drill cuttings and drilling fluid within a shaker.” Defendant contended that all terms in a claim must be given effect, but that the 2006 application does not

provide an explanation as to what the newly-added limitation means or does. (Dkt. # 35 at 8–9.) Additionally, Defendant argued that Plaintiff admitted to the Canadian patent office that the '288 Patent is a continuation-in-part. (Id. at 9.) Defendant did not raise either of these arguments in its Response to Plaintiff's Motion for Preliminary Injunction. (See Dkt. # 22 at 16.) Again, a Rule 59(e) motion "cannot raise issues that could, and should, have been made before the judgment issued." United Nat'l Ins. Co. v. Mundell Terminal Servs. Inc., 740 F.3d 1022, 1031 (5th Cir. 2014) (citing Advocare Int'l LP v. Horizon Labs., Inc., 524 F.3d 678, 691 (5th Cir. 2008)). The Court does not express an opinion as to the merits of these arguments, and cannot properly consider them on reconsideration.

II. Irreparable Harm

Next, a plaintiff seeking a preliminary injunction must "demonstrate that irreparable injury is likely in the absence of an injunction." Winter, 555 U.S. at 22. In the patent infringement context, a patentee-plaintiff must establish both irreparable harm and a "sufficiently strong causal nexus" between that harm and the alleged infringement. Apple Inc. v. Samsung Elecs. Co., 695 F.3d 1370, 1374 (Fed. Cir. 2012). "[T]he central inquiry in deciding whether there is a substantial threat of irreparable harm to the plaintiff is whether the plaintiff's injury could be compensated by money damages." Allied Mktg. Grp., Inc. v. CDL Mktg., Inc., 878 F.2d 806, 810 n.1 (5th Cir. 1989).

Plaintiff alleges that it will suffer irreparable harm in the absence of an injunction because (1) Defendant's continued infringement would result in loss of market share and damage to Plaintiff's reputation and goodwill, and (2) Defendant is unlikely to be able to satisfy a judgment. (Dkt. # 8 at 15.) "Price erosion, loss of goodwill, damages to reputation, and loss of business opportunities are all valid grounds for finding irreparable harm." Celsis In Vitro, Inc. v. CellzDirect, Inc., 664 F.3d 922, 930 (Fed. Cir. 2012). Here, the parties do not dispute that they are each other's sole competitors in the relevant market. "Direct competition in a two-supplier market does suggest the potential for irreparable harm flowing from infringement, as 'it creates an inference that an infringing sale amounts to a lost sale for the patentee[.]'" Wavetronix, 2015 WL 300726, at *7 (quoting Robert Bosch LLC v. Pylor Mfg. Corp., 659 F.3d 1142, 1151 (Fed. Cir. 2011)). The Court thus finds that the potential loss of market share weighs in favor of finding irreparable harm.

Plaintiff also argues that in the absence of an injunction, it will suffer irreparable harm to its reputation and goodwill because the Vac-Screen system's trays are known to fail, and this will damage the industry's perception of Plaintiff's patented technology. (Dkt. # 8 at 14; Carter Decl. ¶¶ 7, 9.) As evidence of the failures, Plaintiff submits several failure reports. (Dkt. # 24-10.) However, throughout the course of its business relationship with Defendant, Plaintiff did not

choose to stop using Defendant's product, although Plaintiff asserts that "tray failures have been an ongoing issue since the beginning." (Dkt. # 24 at 17.) Instead, Plaintiff chose to "get[] together with [Defendant], to see if we can find a way to reduce failure rates." (Carter Decl. ¶ 15.) Plaintiff cannot argue that an injunction is needed to prevent harm that Plaintiff itself did not do everything in its power to prevent.

However, Defendant is a small subsidiary of a foreign corporation, and district courts have often found that money damages are insufficient in cases involving foreign infringers. See Aevoe Corp. v. Shenzhen Membrane Precise Electron Ltd., No. 2:12-CV-00054-GMN, 2012 WL 1532308, at *6 (D. Nev. May 1, 2012) ("the Court is persuaded that it may be difficult or impossible to collect on a money judgment because Defendant currently is a foreign entity and this alone is sufficient to show that [Plaintiff] will likely be irreparably harmed"); Bushnell, Inc. v. Brunton Co., 673 F. Supp. 2d 1241, 1263 (D. Kan. 2009) ("the prospect of collecting money damages from a foreign defendant with few to no assets in the United States tips in favor of a finding of irreparable harm"); Canon Inc. v. GCC Int'l Ltd., 450 F. Supp. 2d 243, 255–56 (S.D.N.Y. 2006) (granting preliminary injunction where defendant was largely based abroad). After considering all of the arguments presented, the Court finds that Plaintiff has shown that it will likely be irreparably harmed if an injunction is not granted.

On reconsideration, Defendant argued that the Court made three errors in determining that Plaintiff would lose market share in the absence of an injunction. Specifically, Defendant argued that (1) Plaintiff has not presented any evidence that it would lose market share absent an injunction, (2) Plaintiff failed to present any evidence that its losses could not be adequately remedied through money damages, and (3) the Court erred in concluding that there were serious questions as to Defendant's ability to pay a judgment given that it is owned by a foreign parent corporation. (Dkt. # 35 at 3.)

First, Defendant contended that Plaintiff has not presented any evidence supporting its position that it would lose market share, or that Plaintiff has any market share to lose. (Id.) However, Defendant admitted that it operates along with Plaintiff in a two-party market. ("Jackson Decl.," Dkt. # 22-3 ¶ 6) ("The only products that FPUSA is aware of in this market are its Vac-Screen product and M-I's Screen Pulse product."). As the Court explained in its previous Order (Dkt. # 31), "[d]irect competition in a two-supplier market does suggest the potential for irreparable harm flowing from infringement, as 'it creates an inference that an infringing sale amounts to a lost sale for the patentee[.]'" Wavetronix, 2015 WL 300726, at *7 (quoting Robert Bosch, 659 F.3d at 1151). The purpose of a preliminary injunction is to prevent future harm, not to remedy any damage Plaintiff may have suffered in its short time in the market. The fact

that Plaintiff is a relatively new player in the market does not mean that Plaintiff cannot suffer harm as a result of infringement of its product. Furthermore, the fact that the parties operate in a two-party market supports Plaintiff's position that it would lose market share because, as the Federal Circuit has noted, there is an inference that any sale of Defendant's product represents a lost sale for Plaintiff.⁵ See Robert Bosch, 659 F.3d at 1151.

Defendant next argued that Plaintiff failed to present any evidence that its losses could not be adequately remedied through money damages. (Dkt. # 35 at 3.) Plaintiff responded that lost sales also represent a loss of visibility in the market, which would result in loss of revenue from its other products, such as replacement shaker screens, centrifuge services, and additional drilling fluid. (Dkt. # 41 at 3; Carter Decl. ¶ 5.) The Federal Circuit has suggested that because lost sales of "tag-along" products are difficult to quantify, such losses support a finding that monetary damages would be insufficient to compensate a patentee. Apple, Inc. v. Samsung Elecs. Co., Ltd., 678 F.3d 1314, 1337 (Fed. Cir. 2012) (O'Malley, J., concurring in part and dissenting in part).

⁵ In its Reply brief, Defendant posits that Plaintiff acknowledged in its supplemental brief regarding the appropriate amount of bond that the amount of lost sales can be quantified. (Dkt. # 43 at 5.) While it is true that Defendant's sales could be chalked up as losses for Plaintiff, it does not automatically follow that Plaintiff's losses could be entirely remedied by money damages for the reasons explained herein.

Finally, Defendant argued that the Court improperly concluded that there were serious questions as to Defendant's ability to pay a judgment given that its parent company is a Canadian corporation. (Dkt. # 35 at 3.) As the Court noted, the plaintiff bears the burden of producing evidence regarding the defendant's financial condition and its ability to pay a judgment, or lack thereof. Robert Bosch, 659 F.3d at 1155. Here, Plaintiff submitted evidence that Defendant, a small subsidiary of a foreign corporation, has a "Moderate to High Risk of severe financial stress." (Dkt. # 8-15.) Furthermore, Defendant admits that 90% of its shares are foreign-owned. ("Russell Decl.," Dkt. # 22-4 ¶ 3.) Again, as the Court explained in its previous Order (Dkt. # 31), district courts have often found that money damages are insufficient in cases involving foreign infringers. (See Dkt. # 31 at 28, collecting cases.)

For these reasons, the Court holds that Plaintiff established that it would be irreparably harmed in the absence of an injunction.

III. Balance of Equities

Third, a plaintiff seeking a preliminary injunction must show that the balance of equities weighs in its favor. "The district court must balance the harm that will occur to the moving party from the denial of the preliminary injunction with the harm that the non-moving party will incur if the injunction is granted." Hybritech Inc. v. Abbott Labs., 849 F.2d 1446, 1457 (Fed. Cir. 1988). A court

may issue a preliminary injunction if, after balancing the parties' respective interests, "neither party has a clear advantage." Id. at 1457–58.

Plaintiff argues the balance of hardships weighs in favor of granting an injunction, because an injunction would maintain the status quo: Plaintiff would continue to furnish its patented technology to customers. (Id.) Defendant responds that an injunction would drastically alter the status quo, because it has been selling its Vac-Screen system to customers in the United States for years before this suit was filed. (Dkt. # 22 at 20.) In the preliminary injunction context, an injunction "preserves the status quo if it prevents future trespasses but does not undertake to assess the pecuniary or other consequences of past trespasses." Atlas Powder Co. v. Ireco Chems., 773 F.2d 1230, 1232 (Fed. Cir. 1985). Thus, the status quo will be preserved by granting an injunction and preventing Defendant from continuing to infringe on Plaintiff's patent.

Plaintiff also argues that an injunction is highly unlikely to put Defendant out of business, as the majority of its business is in Canada and because it has other product lines. (Dkt. # 8 at 16.) Defendant counters that an injunction would prevent it from conducting its business before it has a chance to vindicate itself at trial. (Dkt. # 22 at 21.) "A record showing that the infringer will be put out of business is a factor . . . but does not control the balance of hardships factor." Aria Diagnostics, Inc. v. Sequenom, Inc., 726 F.3d 1296, 1305 (Fed. Cir. 2013).

The fact that a defendant is “‘small’ and could be put out of business if a preliminary injunction issues does not insulate it from the issuance of a preliminary injunction if the other three preliminary injunction factors are sufficient to tip the scale in [the plaintiff’s] favor. Small parties have no special right to infringe patents simply because they are small.” Bell & Howell Document Mgmt. Prods. Co. v. Altek Sys., 132 F.3d 701, 708 (Fed. Cir. 1997). The Court finds that at best, the balance of harms factor is neutral; under such circumstances, the issuance of an injunction is proper. Abbott Labs., 849 F.2d at 1457–58.

On reconsideration, Defendant argued that the Court erred in its analysis of the balance of equities factor when it concluded the fact that Defendant may be put out of business by an injunction is a “neutral” factor, and mistakenly relied on cases involving permanent, rather than preliminary, injunctions. (Dkt. # 35 at 4.) Regarding the second argument, Defendant conceded in its Reply that it misread Bell & Howell Document Management Products Co. v. Altek Systems, 132 F.3d 701, 708 (Fed. Cir. 1997), the case relied upon by the Court, and that Bell & Howell is in fact a preliminary injunction case holding that a defendant’s small size “does not insulate it from the issuance of a preliminary injunction Small parties have no special right to infringe patents simply because they are small.” (Dkt. # 43 at 6 n.3); Bell & Howell, 132 F.3d at 708.

As to Defendant's first argument, the Court notes that its previous Order (Dkt. # 31) did not hold that whether a defendant may be put out of business is a "neutral" consideration. Rather, the Court cited recent Federal Circuit case law for the proposition that "[a] record showing that the infringer will be put out of business is a factor . . . but does not control the balance of hardships factor." Aria Diagnostics, 726 F.3d at 1305 (emphasis added). After weighing the relevant concerns, the Court found that on the whole, the balance of equities factor was, at best, neutral. (Dkt. # 31 at 30.)

In support of its argument that the fact that an injunction might put it out of business tips the balance of interests in its favor, Defendant cited Illinois Tool Works v. Grip-Pak, Inc., 906 F.2d 679, 683–84 (Fed. Cir. 1990). However, the Federal Circuit in that case ultimately made no holding on this issue, concluding that "[w]hether a destructive effect on an infringer's business before trial should be given more or less weight in the balancing of hardships when a patentee shows a strong likelihood of success need not be discussed here, the district court having correctly determined that [plaintiff] made no such showing." Id. at 684. The Court therefore finds no error in its holding, supported by Aria, that the fact that a defendant may be put out of business does not control the balance of equities factor.

Finally, Defendant cited Visto Corp. v. Sproquit Technologies, Inc., 413 F. Supp. 2d 1073, 1093 (N.D. Cal. 2006) in support of its argument that the balance of equities tips in its favor because the harm to Plaintiff in the absence of an injunction is speculative, while an injunction would certainly put Defendant out of business. In Visto, the magistrate judge noted that the harms to the plaintiff “appear[ed] more theoretical or potential than actual or proven,” while the parties did not dispute that an injunction “would devastate [the defendant’s] business.” Id. The magistrate judge then held that “the fact that [the plaintiff] would sustain only minimal damage if a preliminary injunction did not issue, and that [the defendant] would be put out of business . . . is a proper factor to be considered.” Id. (internal quotation marks omitted). The Court first notes that this case does not constitute binding precedent. The Court also notes that the fact that the parties operate in a two-player market indicates that Plaintiff’s injuries are not simply speculative—rather, as the Federal Circuit has stated, any sale of an infringing product very likely amounts to a real loss for the patentee.

Again, given the facts and binding case law, the Court finds that the balance of equities factor favors neither Plaintiff nor Defendant. The issuance of a preliminary injunction is proper where, after balancing the parties’ respective interests, neither party has a clear advantage with respect to this factor. Hybritech Inc., 849 F.2d at 1457–58.

IV. Public Interest

Finally, a plaintiff seeking a preliminary injunction must show that an injunction is in the public interest. In the absence of other relevant concerns, “the public interest is best served by enforcing patents that are likely valid and infringed.” Abbott Labs. v. Andrx Pharm., Inc., 452 F.3d 1331, 1348 (Fed. Cir. 2006). Defendant argues that the interest in enforcing Plaintiff’s patent is outweighed by the public interest in allowing Defendant to continue competing until the merits of the case are addressed. (Dkt. # 22 at 22.) Defendant has not explained why the public has an interest in allowing Defendant to continue operating. To the extent Defendant suggests that the public would benefit from competitive pricing, the Federal Circuit has rejected such an argument. See Payless Shoesource, Inc. v. Reebok Intern. Ltd., 998 F.2d 985, 991 (Fed. Cir. 1993) (noting that “selling a lower priced product does not justify infringing a patent” in weighing the public interest factor). The Court thus finds that the public interest weighs in favor of granting an injunction.

For the reasons stated above, the Court hereby finds that the issuance of a preliminary injunction as to Claim 16 of the ’288 Patent is proper.

V. Bond

The posting of a bond upon the grant of a preliminary injunction is governed by Federal Rule of Civil Procedure 65(c), which provides that:

No restraining order or preliminary injunction shall issue except upon the giving of security by the applicant, in such sum as the court deems proper, for the payment of such costs and damages as may be incurred or suffered by any party who is found to have been wrongfully enjoined or restrained.

Fed. R. Civ. P. 65(c); Sanofi-Synthelabo v. Apotex, Inc., 470 F.3d 1368, 1384–85 (Fed. Cir. 2006). “The amount of a bond is a determination that rests within the sound discretion of a trial court.” Sanofi-Synthelabo, 470 F.3d at 1385. Among other factors, the district court may base its determination on evidence concerning a defendant’s “potential lost profits, lost market share and associated costs of relaunch.” Id. The party against whom a preliminary injunction is sought bears the burden of establishing a rational basis for the amount of the proposed bond. AB Electrolux v. Bermil Indus. Corp., 481 F. Supp. 2d 325, 337 (S.D.N.Y. 2007).

Defendant requests that the Court order Plaintiff to post bond in the amount of \$28.2 million, which represents the value of its business through 2017. (Dkt. # 39 at 4.) Plaintiff offers to post bond in the amount of \$250,000, which represents Defendant’s profits from renting four Vac-Screen systems for ten months in the United States. (Dkt. # 40 at 5.) After reviewing the evidence and arguments submitted by both parties, the Court finds that the appropriate amount lies somewhere in between.

Defendant submitted a declaration stating that its revenues from the Vac-Screen system in the United States were \$6.4 million in 2014 (“Second

Russell Decl.,” Dkt. # 34, Ex. 2 ¶ 6), and that its 2015 revenues are projected to be flat (“First Russell Decl.,” Dkt. # 22, Ex. 4 ¶ 9). Its revenues of \$2.5 million through May 2015 support its projection. (Second Russell Decl. ¶ 6.) The Court therefore finds that it is reasonable to assume that Defendant would earn roughly \$534,000 from its Vac-Screen system in the United States per month going forward. Due to the complexity of this matter, the Court further estimates that litigation would continue at least through the end of 2016. If, at the end of the litigation, Defendant is found to have been wrongly enjoined, the injunction will have cost Defendant approximately \$7,476,000 in revenue.⁶

However, lost revenue would not be enough to compensate Defendant for its losses should it be found to have been wrongly enjoined. Defendant has also submitted declarations stating that it will go out of business within 45 days of the entry of an injunction. (Second Russell Decl. ¶ 4.) When determining the amount of the bond, the Court must also take into consideration factors such as lost market share and costs of relaunch. Sanofi-Synthelabo, 470 F.3d at 1385. Neither party provides estimates of such costs. Instead, Defendant asks the Court to set a bond in the amount of its total enterprise value. Defendant does not provide the Court with any authority supporting its position, and the Court’s own research

⁶ Defendant asserts that its projected revenue will increase through 2016 and 2017. (Second Russell Decl. ¶ 6.) However, because Defendant provides no evidence supporting its projection, the Court declines to use Defendant’s estimate in its calculation.

reveals none. In the absence of additional evidence, the Court finds that a bond in the amount of **\$10 million** is adequate and appropriate under the circumstances.

Plaintiff shall post the bond on or before the close of business on **Friday, December 4, 2015**.

VI. Order

Based on this Court's findings of fact and conclusions of law contained in this Order, and consistent with the Federal Circuit's opinion and instructions:

IT IS HEREBY ORDERED that Defendant FPUSA, LLC and any of its officers, agents, servants, employees, and attorneys, and those persons in active concert or participation with any or all of them⁷ (collectively, the "Enjoined Parties") are hereby preliminarily enjoined from infringing or inducing the infringement of Claim 16 of U.S. Patent No. 9,004,288, until a determination of whether a Permanent Injunction is warranted, by being prohibited by this Court from undertaking the following specified acts:

⁷ Plaintiff asks the Court to specifically include Defendant's parent entities and related subsidiaries in the list of Enjoined Parties on the grounds that those related entities act in concert with Defendant within the meaning of Rule 65(d)(2)(C). (Dkt. # 83 at 11.) If Plaintiff is correct, then its proposed inclusion is unnecessary. If Plaintiff is incorrect, then the related entities will have been wrongfully enjoined. If Plaintiff believes that an entity acting in concert with Defendant is violating this Order, Plaintiff may file a motion for contempt.

(a) making, using, importing, selling, renting, and/or offering to sell or rent in the United States, or importing into the United States, the Vac-Screen system (as defined herein) or any device not colorably different therefrom (collectively, the “Enjoined Products”); and/or

(b) encouraging or assisting others in making, using, promoting, selling, renting and/or offering to sell or rent in the United States, or in importing into the United States, any Enjoined Product by engaging in activities in the United States including, without limitation, the following: (i) advertising, marketing, or otherwise promoting Enjoined Products for operation, use, or intended use in the United States; (ii) entering or fulfilling product orders, or setting, determining, or approving terms of sale or rent, for operation, use, or intended use of Enjoined Products in the United States; (iii) providing customer service or other technical support relating to operation, use, or intended use of Enjoined Products in the United States; (iv) negotiating or entering into licensing, representative, reseller, or distributor agreements relating to operation, use, or intended use of Enjoined Products in the United States; (v) developing, designing, manufacturing, or having manufactured products not colorably different than Enjoined Products to be operated, used, or intended to be used in the United States; and/or (vi) preparing documentation regarding the operation, use, or intended use of any Enjoined

Products in the United States and/or any device that includes any enjoined Product in the United States.

As referenced above, this injunction applies to the “add-on” and “retro-fit” configurations of the Vac-Screen system.⁸

The Court specifically retains jurisdiction to enforce, modify, extend, or terminate this Preliminary Injunction as the equities may require upon a proper

⁸ In its supplemental brief, Defendant argued that Claim 16 does not cover the “add-on” configuration of the Vac-Screen system. (Dkt. # 82 at 3–8.) Claim 16 covers a system by which drill cuttings are separated from drilling fluid by a screen “within a shaker.” Defendant states that in the “add-on” configuration, the vacuum is not located within the shaker, but is instead mounted external to the outlet end of the shaker. (*Id.* at 6.) Defendant therefore contends that the “add-on” configuration cannot likely infringe Claim 16. (*Id.*)

The Court finds, however, that the “add-on” configuration is not “colorably different” from the “retro-fit” configuration of the Vac-Screen system, which the Federal Circuit affirmed does likely infringe Claim 16. The “add-on” system is not colorably different from the “retro-fit” configuration if the differences between the two systems are not significant with respect to those elements of the “retro-fit” configuration that likely infringe Claim 16. *See Ncube Corp. v. SeaChange Int’l Inc.*, 732 F.3d 1346, 1349 (Fed. Cir. 2013). Put otherwise, the “add-on” configuration is not colorably different from the “retro-fit” configuration if it is substantially equivalent to the “retro-fit” configuration, performs substantially the same function in substantially the same way with substantially the same result. *Arlington Indus., Inc. v. Bridgeport Fittings, Inc.*, No. 3:02-CV-0134, 2013 WL 1149230, at *3 (M.D. Pa. Mar. 19, 2013).

The fact that the “add-on” configuration features an external screen and an external pressure differential does not make it significantly different from the “retro-fit” configuration. Arguably, the added-on machinery becomes part of the shaker itself, thus invalidating Defendant’s argument that the screen and pressure differential are external to the shaker. Even if this were not the case, the Court finds that the “add-on” configuration performs substantially the same function in substantially the same way with substantially the same result as the “retro-fit” configuration. Notably, Defendant has made no argument to the contrary.

showing, and to adopt procedures for resolution of any dispute whether a product not specifically covered by this Preliminary Injunction is more than colorably different from the preliminarily adjudged infringing products.

Furthermore, while this Court's temporary stay of its injunction entered on August 11, 2015 (Dkt. # 62) pending disposition of Defendant's appeal to the Federal Circuit expires by its own terms upon the final disposition of such appeal by the Federal Circuit, it is hereby confirmed that such stay has expired and is no longer in effect.

Finally, based on the parties' briefing of the issue and in the Court's exercise of discretion, **IT IS FURTHER ORDERED** that Plaintiff shall post a bond in the amount of **\$10 million** on or before the close of business on **Friday, December 4, 2015** and that this Preliminary Injunction shall take effect immediately upon the posting of such bond.⁹

⁹ Plaintiff additionally requests that the Court order Defendant to provide a copy of this Preliminary Injunction to its "officers, trustees, directors, agents, servants, employees, and attorneys, and those persons in active concert or participation with them, including any and all operators, manufacturers, distributors, retailers, service providers, licensees, and other persons who are would be reasonably expected to be directly or indirectly involved in the making, using, promoting, selling, renting, offering for sale or rent, or importing of any Enjoined Product, and including but not limited to any person, company, or entity to which FPUSA is directly or indirectly selling, renting, or offering for sale or rent one or more of the Enjoined Products." (Dkt. # 83-1 at 31.) Plaintiff also asks the Court to order Defendant to file with the Court and serve on all parties a notice stating the names and addresses of each person, company, or entity that Defendant has notified pursuant to this Preliminary Injunction. (Id.)

IT IS SO ORDERED.

DATED: San Antonio, Texas, November 4, 2015.

A handwritten signature in black ink, appearing to read 'David Alan Ezra', is written over a horizontal line.

David Alan Ezra
Senior United States District Judge

Plaintiff cites no authority for such an order, and neither Defendant's nor the Court's own research has revealed any. Furthermore, Plaintiff provides no evidence to suggest that Defendant intends to somehow circumvent the Preliminary Injunction by surreptitiously infringing the '288 Patent via a related entity who conveniently does not receive actual notice of the injunction. In the absence of such evidence, the Court declines to include Plaintiff's proposed language in the injunction. Again, should Plaintiff suspect that the injunction is being violated, it may file a motion for contempt.